

Scheele's remarkable discoveries are well known, their chronological sequence is approximately as follows :

1770, tartaric acid ; 1771, hydrofluoric acid ; 1774, chlorine, oxygen, and barytes ; 1775, benzoic and arsenic acid ; 1776, uric acid ; 1777, sulphuretted hydrogen ; 1777, action of light on silver salts ; 1778, arsenite of copper, "Scheele's Green," molybdic acid ; 1779, composition of graphite ; 1780, sugar of milk, lactic acid, mucic acid ; 1781, composition of "scheelite," tungstic acid ; 1783, glycerin, prussic acid ; 1784-1785, citric, malic, oxalic and gallic acids.

And the poor apothecary, who accomplished all this in fifteen years, died before he was 44 years of age !

The reprint under review exactly reproduces the contents of the original edition, which does not contain a complete list of Scheele's papers ; the new work might have been made more valuable by including additional treatises, notably those on air and fire.

In arranging the chronological list of Scheele's discoveries, the reviewer assigns 1774 as the date for the isolation of oxygen, though he is aware that Scheele's biographer, Nordenskiöld, endeavors to prove that the gas was known to the Swedish chemist before 1773.

Scheele's essays are written, of course, in the language of the phlogistic theory, and this in some measure obscures their real meaning, when read by chemists of the present day. But by re-writing a paragraph or two in modern style, carefully avoiding later knowledge, it is interesting to note how clearly Scheele expressed himself.

The publishers of this reprint have done their part well, making a handsome volume ; the editor has supplied a rather scanty biography, without a bibliographical note or comment, omitting all reference to the facts mentioned in the volume by Nordenskiöld. The reprint would have been increased in value by the addition of a portrait of the Swede. The volume has an index.

HENRY CARRINGTON BOLTON.

ANNUAIRE POUR L'AN 1902, PUBLIE PAR LE BUREAU DES LONGITUDES.
16mo. 700 pp. Paris. 1902. Price, 1 fr. 50 c.

This volume differs from its well-known predecessors in containing revised tables of coinages, the census of Europe made in 1900, articles on wireless telegraphy by Poincaré, on polyphase

currents by Cornu, on the decimal division of the quadrant by Guyon, and on the Mont Blanc observatory by Janssen. The tables of electrochemical equivalents are well done, and there are many tables on heat, sound, light, and electricity, which might be occasionally referred to, and which are in the main reliable. The first half of the book is devoted to the annual discussion of calendars and astronomical data. J. W. RICHARDS.

THE DYEING OF COTTON FABRICS. A Practical Handbook for the Dyer and Student. BY FRANKLIN BEECH. 44 illustrations. Price, \$3.00.

This is a practical handbook, very well adapted for the use of the dyer and the student. Two hundred and sixty-eight pages devoted to a description of this important industry cannot, of course, exhaust the subject, and Mr. Beech tells us in the preface that such was not his intention. Though brief, the book is sufficiently detailed for the so-called "practical man". The purely chemical side of the subject has received scant attention, as might be expected.

The processes described are modern but the addition of descriptions of some of the newer methods of bleaching is necessary in order to bring the subject down to date. In the chapters on the principles and the practices of dyeing, the author gives a large number of receipts for obtaining various shades. Probably many useful hints may be culled from these, though their value would have been considerably enhanced by the addition of information as to the makers of the various colors used. The chapters on dyeing, however, treat the subject very satisfactorily.

The book is lucidly written, well printed, well illustrated and well bound, and it has a good index. C. W. PARMELEE.

MODERN CHEMISTRY. PART FIRST, THEORETICAL CHEMISTRY. 126 pp. PART SECOND, SYSTEMATIC CHEMISTRY. 203 pp. BY WILLIAM RAMSAY, D.S.C. The Temple Cyclopaedic Primers. London: J. M. Dent & Co. 1900. Price, 1s each.

It is difficult to decide for what class of readers these books are intended. Persons unacquainted with chemistry would certainly have great difficulty in understanding them, while chemists would not naturally turn to a primer for information.

In these little volumes, an examination discloses, however, an adequate, though condensed, presentation of theoretical and systematic chemistry. Their size alone, justifies the use of the title